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EXAMINER

TANG, KENNETH

ART UNIT PAPER NUMBER

2195

DATE MAILED: 05/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/801,407

Applicant(s)

BASKEY ET AL.

Examiner

Kenneth Tang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 58-115 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 58-115 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This action is in response to the Amendment filed on 2/24/05. Applicant's arguments have been fully considered but are moot in view of the new grounds of rejections.
2. Claims 58-115 are presented for examination.

Claim Objections

3. Claim 106 depends on claim 9. However, claim 9 has been cancelled by the Applicant.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 58 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention:

- a. In claim 58, there is no relationship made or established between the "sizing metric" (in preamble) to anything else in the body of the claim language. It is not made explicitly clear whether this term refers to the throughput information (line 5), the resource control parameter (lines 10-11).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 58-115 are rejected under 35 U.S.C. 103(a) as being unpatentable over Romero et al. (hereinafter Romero) (US 2002/0129127 A1) in view of Pal et al. (hereinafter Pal) (US 6,301,66).**

6. As to claim 58, Romero teaches a system for the collection and analysis of computer system capacity data in a partition which determines a sizing metric comprising:

a component in the computer system issuing a command to obtain throughput information of a computer system first partition in order to obtain resource utilization information of the computer system first partition ([0007], [0033], [0036]);

the component further operable to calculate a resource control parameter using the information obtained ([0033]); and

7. Romero teaches determining a resource control parameter using the information obtained but fails to explicitly teach the determining done by a calculation. However, Pal teaches a resource allocating system in which a calculation involving resource parameters are used to determine the resource allocation (*col. 11, lines 1-25*). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the feature of a determining a resource control parameter using the information obtained be done by a calculation in order to obtain a decision of resource allocation based on various significant parameters and constraints. In addition, Romero teaches a first and second partition in a computer system with memory.

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Romero fails to teach that the memory accessible to both partitions is shared and information between the two partitions is transferred through the shared memory. However, Pal also teaches having a shared memory containing a resource allocator (information is transferred between the partitions through the resource allocator) for allocating resources and as well as storage allocation information for the partitions (*col. 2, lines 35-40*). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the feature of a shared memory for the partitions because this would improve resource allocation strategies (*col. 1, lines 38-41 and col. 2, lines 35-40*).

8. Romero fails to explicitly teach a monitor connected to the manager, wherein the monitor indicates a resource allocation responsive to the resource control. However, Pal teaches an object allocator being responsible for monitoring the resource allocation process (*col. 4, lines 48-64*). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the feature of a monitor connected to the manager, wherein the monitor indicates a resource allocation responsive to the resource control in order to provide an indicator as to when the resource allocator needs to allocate or deallocate.

9. As to claim 59, it is rejected for similar reasons as stated in the rejection of claim 58. In addition, Romero teaches a network (fig. 1, 120) and an analysis application ([0033]). Romero teaches providing the resource control parameter to a user agent, the resource control parameter indicating any suitable resource performance information regarding to partitions ([0033]).

Romero does not specifically teach the information to be in real-time. However, "Official Notice" is taken that both the concept and advantages of providing that real-time performance

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information is well known and expected in the art. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include real-time performance information to the existing performance information because it would increase accuracy and be the most up to date.

10. As to claim 60, Romero teaches wherein the resource utilization information comprises CPU utilization ([0033]).

11. As to claim 61, Romero teaches the user agent displaying at a terminal, the resource control parameter wherein the resource control parameter comprises the throughput information as a function of resource utilization ([0033]).

12. As to claim 62, Romero teaches the user agent displaying at a terminal, the resource control parameter comprising inter-interval weighted averages as a function of resource utilization ([0031], [0033] and claim 15).

13. As to claim 63, Romero teaches the user agent displaying at a terminal, the resource control parameter comprising shifted throughput information as a function of resource utilization, wherein the shifted throughput information is derived from the throughput information obtained ([0033]).

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14. As to claim 64, Romero fails to explicitly teach the user agent displaying as a graph at a terminal the resource control parameter, the display comprising effective utilization versus resource utilization wherein effective utilization derived in the calculating step comprises change in throughput divided by change in resource utilization. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the feature of the resource control parameter is displayed at a terminal as change in throughput divided by the change in resource utilization versus resource utilization because it would be very desirable to see an analysis of the changes done.

15. As to claim 65, Romero fails to explicitly teach the user agent displaying at a terminal a mark, the mark indicating the utilization at which the effective utilization is half of its maximum. However, it would be obvious to one of ordinary skill in the art at the time the invention was made to include the feature that the display of effective utilization is marked at the utilization at which the resource control parameter is half of its maximum because it is the medium point of its utilization.

16. As to claim 66, Romero teaches the user agent using the resource control parameter to manage a workload of the first partition ([0007]).

17. As to claim 67, Romero teaches wherein the using step is performed by a workload manager ([0007]).

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18. As to claim 68, Romero teaches wherein the workload manager is in a third partition ([0007]).

19. As to claim 69, Pal teaches providing the throughput information and the resource utilization information for the calculating step by way of a shared portion of memory, the shared portion of memory programmably accessible to both partitions, the shared memory for transferring information between the computer system first partition and the computer system second partition (*see Abstract, e.g.*).

20. As to claim 70, Romero teaches providing the throughput information and the resource utilization information for the calculating step using a single operation memory to memory transfer function ([0018]).

21. As to claim 71, Romero teaches wherein the workload is managed by modifying resources allocated to the first partition ([0007]).

22. As to claim 72, Romero teaches wherein the resources include I/O ([0018]).

23. As to claim 73, Romero teaches wherein the resources include memory ([0020]).

24. As to claim 74, Romero teaches wherein the resources include processors ([0003]).

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25. As to claim 75, Romero teaches wherein the workload is managed dynamically ([0005] – [0006]).

26. As to claim 76, Romero in view of Pal fails to explicitly teach wherein the throughput information comprises network packet counts. However, it is well known in the art that throughput information are network packet counts. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the feature of the throughput information being network packet counts because this is a measure of how much information has been transmitted over a network (throughput) and it is needed for the calculations involving resource allocation.

27. As to claim 77, Romero in view of Pal fails to explicitly teach wherein the throughput information comprises an inverse throughput. However, it is well known in the art that the inverse throughput can be used as its inverse form. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the feature of using the inverse throughput in its inverse form to the existing system in order to make the value compatible (units wise, for example) for resource allocation calculations.

28. As to claim 78, it is rejected for the same reasons as stated in the rejection of claim 59.

29. As to claims 79-96, they are rejected for the same reasons as stated in the rejections of claims 60-77.

30. As to claim 97, it is rejected for the same reasons as stated in the rejection of claim 59.

31. As to claims 98-115, they are rejected for the same reasons as stated in the rejections of claims 60-77.

Response to Arguments

32. During patent examination, the pending claims must be “given their broadest reasonable interpretation consistent with the specification.” *In re Hyatt*, 211 F.3d 1367, 1372, 54 USPQ2d 1664, 1667 (Fed. Cir. 2000). Applicant always has the opportunity to amend the claims during prosecution, and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. *In re Prater*, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-51 (CCPA 1969).

33. *Applicant argues on page 14 of the Remarks that Romero doesn't teach a method for the collection and analysis of computer system capacity data in a partition which determines sizing metric.*

In response, the Examiner respectfully disagrees. The computer system is collecting and analyzing information such as resource allocation, or any other suitable information regarding partitions (*see page 4, [0033], 2nd column*).

In addition, there is no connection made between the sizing metric in the preamble to anything else in the body of the claim.

In response to applicant's arguments, the recitation "method for the collection and analysis of computer system capacity data in a partition which determines sizing metric" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

34. *Applicant argues on pages 15-16 of the Remarks that Pal does not express or imply a partitioned computer system, which therefore constitutes as non-analogous art with Romero, and therefore, cannot be combined to make a 35 USC 103 rejection.*

In response, the Examiner respectfully disagrees. Pal teaches resource allocation with partitions (*see Abstract, e.g.*). Romero also teaches resource allocation with partitions (*page 1, [0007], e.g.*). Romero and Pal are in the same field of endeavor. Applicant's argument has been fully considered but is not found to be persuasive.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth Tang whose telephone number is (571) 272-3772. The examiner can normally be reached on 8:30AM - 6:00PM, Every other Friday off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kt
5/16/05


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